

全国中文核心期刊
美国化学文摘（CA）收录源期刊

IYPT 2019

国际化学元素周期表年

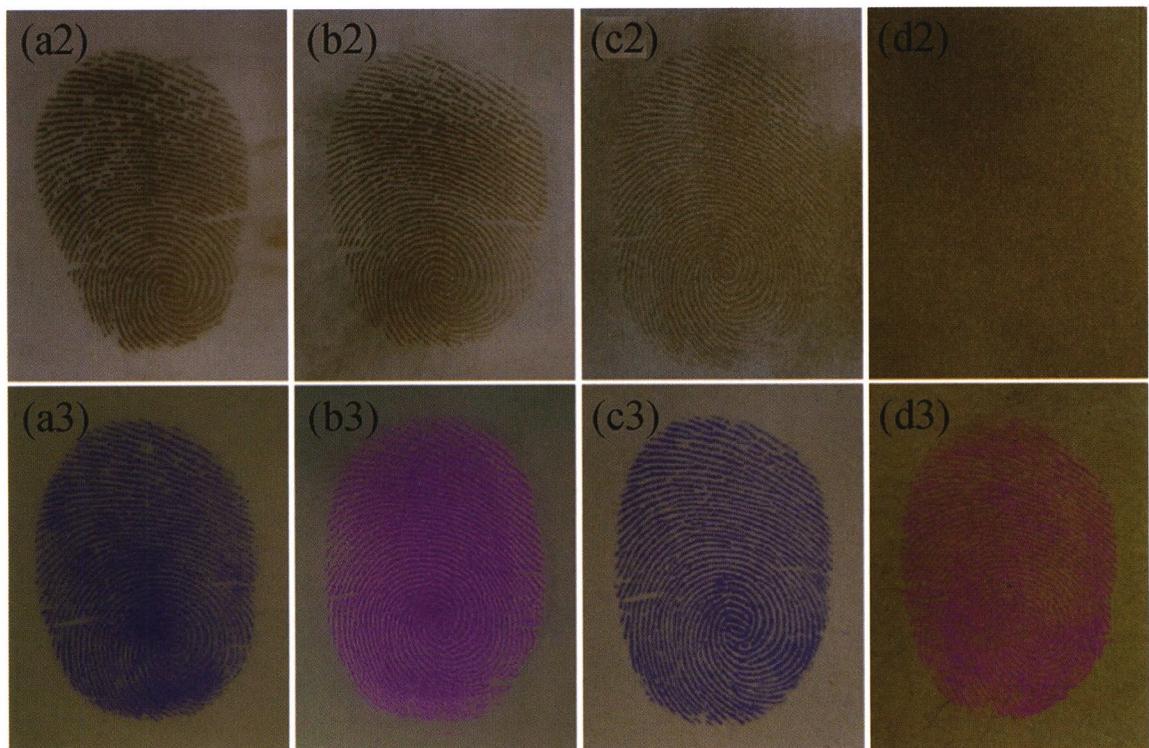


Q K 1 9 1 0 6 8 1

化学教育(中英文)

Chinese Journal of Chemical Education

2019 年 第 40 卷 第 6 期 Vol.40 No.6



邮发代号：2-106

ISSN 1003-3807



0.6

9 771003 380192
HUAXUE JIAOYOU



CHINESE
CHEMICAL
SOCIETY



主管：中国科学技术协会
主办：中国化学会
北京师范大学

万方数据

国际化学元素周期表年

- 从“精灵”到催化“多面手”的钴元素 曹彦伟 沈超仁 夏春谷 何林 (1)

化学·生活·社会

- 配位化学中的专业名词解析 王晖 王毓明 (10)

课程·教材·评价

- 高校本科化学和应用化学专业人才培养中专业课程的设置研究 李东祥 李春芳 张婧 徐洁 赵继宽 (17)

理论教学

- 数学方法推导一元弱酸溶液氢离子浓度的近似公式及适用条件 宋慧宇 王海水 (25)

- 混合式教学在“仪器分析”课堂教学中的应用探讨 郭明 夏琪涵 周建钟 文先红 吴荣晖 李铭慧 (30)

实验教学

- 酞菁金属配合物的合成及光谱特性研究 徐祥 胡敏 王亦清 杨国鑫 (36)

- 基于应用型人才培养的分析化学实验教学改革 兰瑞家 苏文斌 (40)

- $\gamma\text{-MnO}_2\text{-TiO}_2$ /凹凸棒土制备及应用的实验设计 谢爱娟 陶依洋 金响 孔泳 罗士平 薛冰 马江权 周国平 (45)

- 思维导图在仪器分析实验教学中的应用——以电化学分析实验为例 党雪平 陈怀侠 黄建林 (50)

- 开放实验：磁性光催化剂合成及其对丁基黄药的降解 马政彤 宋乃忠 贾琼 (53)

教师教育

- 将教师的科学本质观转化到课堂实践——国际文献综述 石凯丽 刘瑞 冯华宇 (56)

非化学专业化学教育

- 土壤重金属迁移转化实验应用于环境化学实验教学的探索——以室内土柱淋滤模拟实验为例 王冠 方爱冬 任非凡 马丽娟 陈裕颖 (61)

- 碱性染料-硅藻土复合粉末制备及用于手印显现的综合化学实验 袁传军 (66)

- 虚实融合的生物制药实验教学设计 余法红 陈梅佳 夏小云 蒋涛 (71)

研究生教育

- 基于问题导向学习模式的研究生液质联用仪实验教学实践 杨丽萍 祝凌燕 展思辉 (76)

信息技术与化学

- 突破实验室空间限制的“大学化学实验”教学实践 鹿现永 (81)

- 巧用二组分金属固液相图的测绘实验讲授 Origin 软件入门 陈茂龙 王少芬 童海霞 (85)

问题讨论与思考

- 某些分析化学实验教材中均相沉淀概念的误区 王荣 马丞惠 (89)

国内外动态

- 新加坡职前化学教师教育模式：评析与启示 孙影 刘禹 陈金水 (91)

- 封面图片 (69)

- “国际化学元素周期表年”专栏征稿通知 (9)

- 2019年《化学教育》订阅通知 (60)

- 中国化学会第五届《化学教育》读者、作者、编者学术交流会暨全国化学教育高峰论坛（第一轮通知） (97)

本期责任编辑 杨金瑞

CHINESE JOURNAL OF CHEMICAL EDUCATION

2019 Vol. 40 No. 6

Sponsored by Chinese Chemical Society and Beijing Normal University

International Year of the Periodic Table of Chemical Elements

Cobalt: From Goblin to Versatile Catalysts CAO Yan-Wei SHEN Chao-Ren XIA Chun-Gu HE Lin (1)

Chemistry-Life-Society

Analysis of Some Nouns in Coordination Chemistry WANG Hui WANG Yu-Ming (10)

Curriculum-Teaching Materials-Assessment

Professional Curriculum Setting for Talent Training of Undergraduates Majoring in Chemistry and Applied Chemistry LI Dong-Xiang LI Chun-Fang ZHANG Jing XU Jie ZHAO Ji-Kuan (17)

Theory Teaching

Estimating Hydrogen Ionic Concentration for a Dilute and Weak Monoprotic Acid Solution by Mathematical Method SONG Hui-Yu WANG Hai-Shui (25)

Application of Blended Teaching in Classroom Teaching of Instrumental Analysis GUO Ming XIA Qi-Han ZHOU Jian-Zhong WEN Xian-Hong WU Rong-Hui LI Ming-Hui (30)

Experiment Teaching

Synthesis and Spectroscopic Properties of Metal Phthalocyanines XU Xiang HU Min WANG Yi-Qing YANG Guo-Xin (36)

Teaching Reform of Analytical Chemistry Experiment Based on Training of Application-Oriented Talents LAN Rui-Jia SU Wen-Bin (40)

Experimental Design for Preparation and Application of γ -MnO₂-TiO₂/Attapulgite XIE Ai-Juan TAO Yi-Yang JIN Xiang KONG Yong LUO Shi-Ping XUE Bing MA Jiang-Quan ZHOU Guo-Ping (45)

Application of Mind Mapping in Experiment Teaching of Instrumental Analysis with Electrochemical Analysis Experiment as Example DANG Xue-Ping CHEN Huai-Xia HUANG Jian-Lin (50)

Opening Experiment: Preparation of Magnetic Photocatalyst and Degradation of Butyl Xanthate MA Jiu-Tong SONG Nai-Zhong JIA Qiong (53)

Teacher Education

Transformation of Teacher's View of Nature of Science into Classroom Practice: International Literatures Review SHI Kai-Li LIU Rui FENG Hua-Yu (56)

Chemical Education for Non-Chemistry Majors

Application of Experiment of Transfer-Transformation of Heavy Metals in Soil in Environment Chemistry Experiment Teaching with Example of Indoor Soil-Column Leaching Simulation Experiment WANG Guan FANG Ai-Dong REN Fei-Fan MA Li-Juan CHEN Yu-Ying (61)

Comprehensive Chemical Experiment: Preparation and Application of Basic Dye-Diatomite Composite Powders in Latent Fingerprint Development YUAN Chuan-Jun (66)

Teaching Design for Biological Pharmaceutical Experiment Based on Virtual-Actual Combination YU Fa-Hong CHEN Mei-Jia XIA Xiao-Yun JIANG Tao (71)

Postgraduate Education

Problem-Based Learning in Postgraduate Experiment Courses for HPLC-MS YANG Li-Ping ZHU Ling-Yan ZHAN Si-Hui (76)

Information Technology and Chemistry

Teaching Practice of College Chemistry Experiment Breaking Through Lab Space Limitation LU Xian-Yong (81)

Introduction of Origin Software in Experiment of Solid-Liquid Phase Diagram of Binary Metals CHEN Mao-Long WANG Shao-Feng TONG Hai-Xia (85)

Discussion and Thinking of Questions

Misunderstanding of Homogeneous Precipitation in Some Analytical Chemistry Experiment Textbooks WANG Rong MA Cheng-Hui (89)

Domestic and Overseas Trends

Pre-Service Chemistry Teacher Education Model in Singapore: Evaluation and Enlightenment SUN Ying LIU Yu CHEN Jin-Shui (91)

化学教育(中英文)

(半月刊·1980年创中文刊·2017年变更为中英文刊)

2019年第40卷第6期3月18日出版

主管单位 中国科学技术协会
主办单位 中国化学会 北京师范大学
编辑出版 《化学教育(中英文)》编辑部
编辑部地址 北京师范大学化学楼217室
邮政编码 100875
电话(传真) 010-58807875
咨询信箱 hxjy-jce@263.net
投稿网址 http://www.hxjy.org

顾问 刘知新
主编 刘正平
副主编 李艳梅 孙世刚 王磊 王祖浩
刊名题字 杨屹 杨振忠 郑长龙 朱玉军(专职)
印刷装订 戴安邦
总发行处 保定华泰印刷有限公司
订阅 中国邮政集团公司北京市报刊发行局
全国各地邮局

刊号 ISSN 1003 - 3807
CN 10 - 1515/O6

国内邮发代号 2-106

国外发行代号 M3070

定价 21.00 元

CHINESE JOURNAL OF CHEMICAL EDUCATION

2019 Vol. 40 No. 6

Sponsored by Chinese Chemical Society and Beijing Normal University

International Year of the Periodic Table of Chemical Elements

Cobalt: From Goblin to Versatile Catalysts CAO Yan-Wei SHEN Chao-Ren XIA Chun-Gu HE Lin (1)

Chemistry-Life-Society

Analysis of Some Nouns in Coordination Chemistry WANG Hui WANG Yu-Ming (10)

Curriculum-Teaching Materials-Assessment

Professional Curriculum Setting for Talent Training of Undergraduates Majoring in Chemistry and Applied Chemistry LI Dong-Xiang LI Chun-Fang ZHANG Jing XU Jie ZHAO Ji-Kuan (17)

Theory Teaching

Estimating Hydrogen Ionic Concentration for a Dilute and Weak Monoprotic Acid Solution by Mathematical Method SONG Hui-Yu WANG Hai-Shui (25)

Application of Blended Teaching in Classroom Teaching of Instrumental Analysis GUO Ming XIA Qi-Han ZHOU Jian-Zhong WEN Xian-Hong WU Rong-Hui LI Ming-Hui (30)

Experiment Teaching

Synthesis and Spectroscopic Properties of Metal Phthalocyanines XU Xiang HU Min WANG Yi-Qing YANG Guo-Xin (36)

Teaching Reform of Analytical Chemistry Experiment Based on Training of Application-Oriented Talents LAN Rui-Jia SU Wen-Bin (40)

Experimental Design for Preparation and Application of γ -MnO₂-TiO₂/Attapulgite XIE Ai-Juan TAO Yi-Yang JIN Xiang KONG Yong LUO Shi-Ping XUE Bing MA Jiang-Quan ZHOU Guo-Ping (45)

Application of Mind Mapping in Experiment Teaching of Instrumental Analysis with Electrochemical Analysis Experiment as Example DANG Xue-Ping CHEN Huai-Xia HUANG Jian-Lin (50)

Opening Experiment: Preparation of Magnetic Photocatalyst and Degradation of Butyl Xanthate MA Jiu-Tong SONG Nai-Zhong JIA Qiong (53)

Teacher Education

Transformation of Teacher's View of Nature of Science into Classroom Practice: International Literatures Review SHI Kai-Li LIU Rui FENG Hua-Yu (56)

Chemical Education for Non-Chemistry Majors

Application of Experiment of Transfer-Transformation of Heavy Metals in Soil in Environment Chemistry Experiment Teaching with Example of Indoor Soil-Column Leaching Simulation Experiment WANG Guan FANG Ai-Dong REN Fei-Fan MA Li-Juan CHEN Yu-Ying (61)

Comprehensive Chemical Experiment: Preparation and Application of Basic Dye-Diatomite Composite Powders in Latent Fingerprint Development YUAN Chuan-Jun (66)

Teaching Design for Biological Pharmaceutical Experiment Based on Virtual-Actual Combination YU Fa-Hong CHEN Mei-Jia XIA Xiao-Yun JIANG Tao (71)

Postgraduate Education

Problem-Based Learning in Postgraduate Experiment Courses for HPLC-MS YANG Li-Ping ZHU Ling-Yan ZHAN Si-Hui (76)

Information Technology and Chemistry

Teaching Practice of College Chemistry Experiment Breaking Through Lab Space Limitation LU Xian-Yong (81)

Introduction of Origin Software in Experiment of Solid-Liquid Phase Diagram of Binary Metals CHEN Mao-Long WANG Shao-Feng TONG Hai-Xia (85)

Discussion and Thinking of Questions

Misunderstanding of Homogeneous Precipitation in Some Analytical Chemistry Experiment Textbooks WANG Rong MA Cheng-Hui (89)

Domestic and Overseas Trends

Pre-Service Chemistry Teacher Education Model in Singapore: Evaluation and Enlightenment SUN Ying LIU Yu CHEN Jin-Shui (91)

化学教育(中英文)

(半月刊·1980年创中文刊·2017年变更为中英文刊)

2019年第40卷第6期3月18日出版

主管单位 中国科学技术协会
主办单位 中国化学会 北京师范大学
编辑出版 《化学教育(中英文)》编辑部
编辑部地址 北京师范大学化学楼217室
邮政编码 100875
电话(传真) 010-58807875
咨询信箱 hxjy-jce@263.net
投稿网址 http://www.hxjy.org

顾问 刘知新
主编 刘正平
副主编 李艳梅 孙世刚 王磊 王祖浩
刊名题字 杨屹 杨振忠 郑长龙 朱玉军(专职)
印刷装订 戴安邦
总发行处 保定华泰印刷有限公司
订阅 中国邮政集团公司北京市报刊发行局
全国各地邮局

刊号 ISSN 1003 - 3807
CN 10 - 1515/O6

国内邮发代号 2-106

国外发行代号 M3070

定价 21.00 元